Montana Communicable Disease Weekly Update:
Summary of MMWR Week 28 ending 7/17/10
Release date 07/27/10

DISEASE INFORMATION

Summary – MMWR Week 28 - Ending 7/17/10 – Disease reports received at DPHHS during the reporting period June 27th through July 3rd, 2010 included the following:

- Vaccine Preventable Diseases: None
- Invasive Disease: *Streptococcus pneumoniae (1)*
- Enteric Diseases: Campylobacteriosis (6), *E. coli O157:H7* (1)
- Other Conditions: None
- Travel Related Conditions: Dengue Fever (1), Lyme Disease (1)

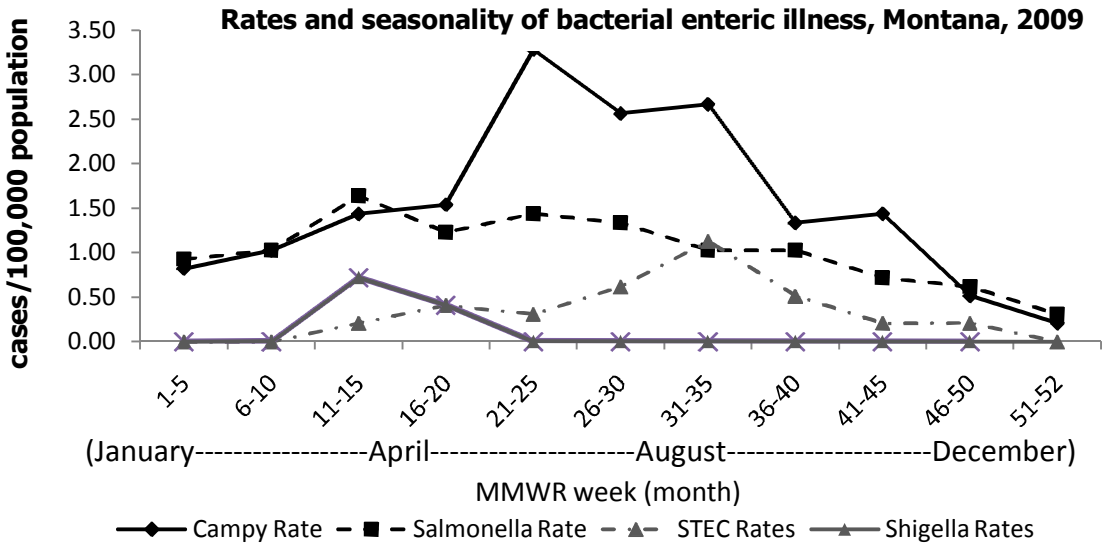
NOTE: The report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this past reporting week; (4) clusters and outbreaks; and (5) an STD summary.

THE "BUZZ"

Campylobacter Outbreak - The Montana Department of Public Health and Human Services (DPHHS) recently received numerous reports of diarrheal illness in visitors to the Hebgen Lake area of Gallatin County. The causative agent in many of these cases has been confirmed as the bacterium *Campylobacter.* Several ill people have been hospitalized.

Campylobacter bacteria cause an infectious disease called Campylobacteriosis. Most people who become ill with campylobacteriosis get diarrhea, cramping, abdominal pain, and sometimes fever within two to five days after exposure to the organism. However, onset can occur as early as one day and as late as ten days after exposure. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts one week. In persons with compromised immune systems, *Campylobacter* occasionally spreads to the bloodstream and causes a serious life-threatening infection. Health Alert Network reports on this ongoing outbreak can be viewed here: http://www.dphhs.mt.gov/PHSD/ph-informatics/PH-informatics-HAN-message-archive.shtml

Enteric Illness Investigation – Summer time brings outdoor fun complete with water sports, BBQs, potluck events, increased human – animal contact, and typically higher rates of enteric illness in MT (Figure). Collecting timely information is of upmost importance during an enteric illness investigation. Identifying possible sources of illness can provide information useful for public health messaging and education that may be important and unique to our state. Most cases of enteric illness in Montana and the United States appear sporadically, however, cases are sometimes linked to local and national outbreaks. The earlier information is gathered from an ill person, the better the patient's recall will be, and the better the chance becomes of identifying a source. Checklist questionnaires combined with an open ended 3 -5 day food history provide the most thorough types of exposure histories. The MT Communicable Disease Epidemiology program is working to provide tools for local health departments to use during enteric illness investigations. To download exposure questionnaires and protocols for Shiga toxin-producing *Escherichia coli* (STEC) and *Salmonella*, or a form for collecting general complaint information when a pathogen has not been identified, log on to the TCC at https://www.montanapublichealthtcc.org/kc/login/login.asp?kc_ident=kc0001&strUrl=http://www.montanapublichealthtcc.org/Default.asp enter your user name and password, and enter the FCS Team Room, or visit: http://www.dphhs.mt.gov/PHSD/epidemiology/documents/E_coliMT.pdf or http://www.dphhs.mt.gov/PHSD/epidemiology/documents/Salm_MT.pdf
Check back for new protocols and additional pathogen specific questionnaires coming soon!



West Nile Virus – The mosquitoes are biting and it's time to think about WNV in MT. To date, MT has had no reports of human WNV illness, however, now is the time to start reminding people about the importance of mosquito control measures and WNV prevention. The best protection against WNV is to avoid being bitten by mosquitoes. This can be accomplished by following a few simple guidelines:

- Mosquitoes bite most often at dawn and dusk, wear long pants and long sleeved shirts if you are out during these hours.
- Use a mosquito repellent, DEET is most effective at repelling mosquitoes
- Empty uncovered containers of standing water that may be near or around the home
- Change outdoor pet water frequently

If you'd like "Fight the Bite" posters or brochures contact us at (406) 444-0273. CDC WNV educational materials are available at http://www.cdc.gov/ncidod/dvbid/westnile/prevention_info.htm.

INFORMATION / ANNOUNCEMENTS

Bed Bugs – Bed bugs are often thought to be ancient history and have been mired in song and story. However, in recent years, bed bugs have made a striking comeback in the United States, and have been reported in Montana. Although they are not known to transmit disease, bed bug infestations may result in irritating, itchy bites and anxiety. If a bed bug infestation is suspected, certain steps must be taken to eliminate the bugs, including consultation with a pest management professional. The Michigan Department of Community Health has gathered experts from across the state government, local municipalities and industry groups to develop resources useful for combating bed bug infestations and for preventing the spread of bed bugs. To view these resources and learn more about bed bugs: visit: http://www.michigan.gov/emergingdiseases/0,1607,7-186-26346_25949_55522---,00.html

Lyme Disease Testing – Although *Ixodes scapularis*, the tick vector for Lyme disease has not yet been found in MT, Lyme disease is sometimes diagnosed in MT residents that have traveled to Lyme disease endemic areas. Lyme disease can be difficult to diagnose and **clinical presentation coupled with specific laboratory testing is necessary to confirm a case of Lyme disease**. The current CDC recommendations for laboratory confirmation of Lyme disease include:

1) a positive culture for *Borrelia burgdorferi* **OR**

2) a two-step process for testing blood –

- The first step uses an ELISA or IFA test. If this test is positive:
- A second test using a Western blot should be run to confirm the initial ELISA or IFA test

Serology is the most common test used to test for Lyme disease. A positive ELISA or IFA followed by a positive Western blot coupled with a clinical marker for the disease (erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients, with a known exposure, or a late clinical manifestation including rheumatologic, neurologic, and cardiac abnormalities), and illness onset date are necessary to confirm a case of Lyme disease. For more information visit http://www.cdc.gov/ncidod/dvbid/lyme/ld_humandisease_diagnosis.htm

24/7 AVAILABILITY

The Communicable Disease Epidemiology program is available 24 hours a day/7days a week/365 days a year. Please call 406.444.0273 if you need immediate communicable disease epidemiology assistance. The answering service will take a message and we will return the call as quickly as possible.

This newsletter is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: *http://cdepi.hhs.mt.gov*.